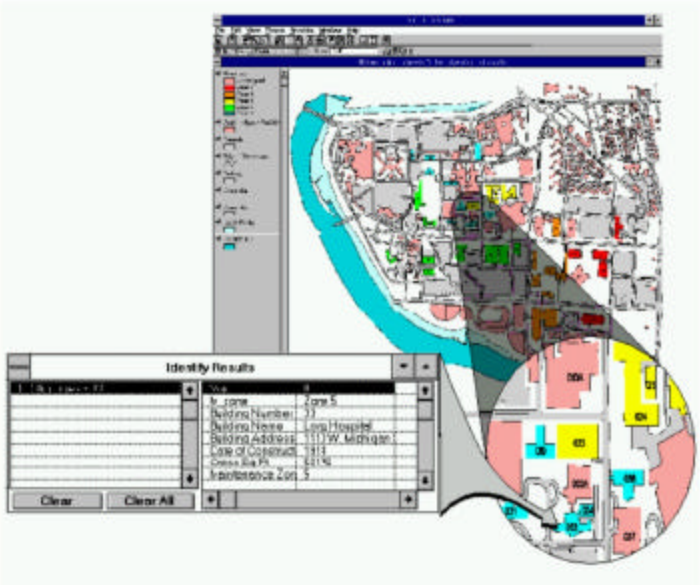
Section 2. Indiana Geographic Information Council: Strategic Plan

Introduction

A geographic information system (GIS) is an automated tool that allows the collection, modification, storage, analysis, and display of spatially oriented data. At its most basic level, GIS consists of a computerized map, or more accurately a series of maps. Each map is a separate layer that contains graphic data that can be overlaid upon the other layers to provide extensive details about the area being mapped.

The abilities of GIS to handle graphic data are impressive, but its real power lies in the ability to create "intelligent maps" that relate non-graphic attribute data to graphic data contained in the maps. Attribute data include any kind of quantitative or textual information that can be contained in a tabular database format. Much of this information can be tied in some way to a geographic element, such as an address, watershed, census tract, or county. For instance, a properly constructed GIS database allows a user to "point and click" on a map of a region, city, or neighborhood and see a window containing a demographic description of the residents drawn from census data. Like the graphic data, the tabular data can be edited, updated, and manipulated for purposes of analysis or maintenance.



GIS also supports the decision-making process by providing tools for the query, analysis, and mapping of data. For example, GIS can be used to help reach a decision about the location of a new health clinic that is located in a high-need area, is close to public transportation and/or parking, and has minimal environmental impact. GIS technology has been used to assist in tasks such as presenting information at planning inquiries, projecting population growth along transportation corridors, developing natural resource inventories, and analyzing water quality

impacts of proposed activities.

Public organizations at all levels of government, private organizations, and not-for-profits must assimilate and provide access to an immense amount of information to deliver services, technical assistance, and information about their programs and projects in Indiana. To make the best decisions we need the best – *most reliable* – data. Over 80% of public data has a geographic component. For education, human services, public safety, environment, tax assessment, agriculture, and others, GIS data *are* the best data. But not if the data don't "fit" together, not if the data aren't accessible, not if we don't know the data exist, and not if the data aren't well documented. For informed decision-making using GIS these data should be a coordinated statewide resource.

Coordination of GIS resources is vital to informed decision-making. GIS technology provides tools to assist with the management, analysis, and mapping of this geographic-based information. Organizations across the state readily recognize that GIS provides individuals and communities with the ability to understand and use Indiana's resources wisely[1]. GIS enables government of resources critical to Indiana's quality of life – from infrastructure to land resources to human services – and to make the delivery of services, from e-government to e-commerce, more effective and timely. The Indiana Geographic Information Council is committed to coordinating GIS resources on a statewide basis.

Mission and Vision Statements

The Indiana GIS Initiative and Indiana Geographic Information Council have adopted the following objectives: "Coordination of Indiana GIS through:

- Dissemination of data and data products
- Education and outreach
- Adoption of standards
- Building partnerships"

Organization Profile and History

In December 1997, the Indiana Association of Soil and Water Conservation Districts called a meeting of various county, state, and federal agencies, as well as private companies known to have active GIS programs or interests. The goal of this meeting was to determine how funding could be generated to produce statewide digital orthophotography. The group that had assembled decided to continue meeting with a goal of implementing statewide GIS coordination. This effort became known as the Indiana Geographical Information Systems Initiative (INGISI).

In 1998, thirty-nine government, academic and industry representatives signed the *Indiana GIS Initiative Commitment to Success* (Appendix B), formally endorsing the broad principles of INGISI. Funding for INGISI activities was provided by a start-up grant from the Federal Geographic Data Committee (FGDC), matching funds from the Indiana Department of Environmental Management, and a GIS Metadata information and training grant, also from FGDC. The success of the organization has been enhanced by the willingness of many of its

member organizations to donate staff time and resources to further the goals of the initiative.

In response to the need to formalize the effort, the INGISI Steering Committee spearheaded the Indiana Geographic Information Council (IGIC) as the formal statewide coordinating council for Indiana. On June 15, 2000 Governor Frank O'Bannon issued a proclamation recognizing the establishment of and the state's participation in IGIC. IGIC is also recognized as a Cooperating Group in the National Spatial Data Infrastructure by the Federal Geographic Data Committee (Appendix D). As an outgrowth of the Indiana GIS Initiative, IGIC represents statewide interests and its' membership is equitably distributed by our state's diverse GIS user communities. IGIC and the Indiana GIS Initiative now serve over 450 individuals from a diverse group of more than 150 organizations that span the full range of public and private GIS sectors at the Federal, State, and local levels.

Organizationally, the Indiana Geographic Information Council is responsible for the coordination of INGISI activities. Six committees are assigned various responsibilities that further the objectives of IGIC and INGISI:

- Education
- Conference
- Networking
- Standards
- Data Sharing
- Web Development

Each committee is chaired or co-chaired by a member of IGIC and is responsible for reporting its progress during the quarterly meetings. IGIC coordinates closely and shares responsibilities with the State Agencies GIS Task Force and State GIS Coordinator.

Critical Issues and Strategies

Several organizations over the past decade have expressed the need for a coordinated statewide GIS. The State of Indiana now recognizes coordinated GIS as important to the welfare of the state and its citizens. Indiana's Economic Strategy (Indiana Economic Development Council, Inc. 1999. *Break Away Growth – Indiana's Economic Development Strategy*) details policies for sustainable economic development, including the need for a coordinated statewide GIS, to promote the growth of livable, healthy communities. Additionally, state government has recently hired its first State Agency GIS Coordinator to support intra-governmental GIS and to coordinate with statewide groups.

Throughout Indiana, strategic alliances have been formed among organizations that have recognized the need for statewide GIS. State and federal agencies such as the USDA Natural Resources Conservation Service, Federal Highway Administration, Indiana Department of Environmental Management, US Geological Survey, Indiana Geological Survey, and Indiana Department of Natural Resources are supporting statewide GIS in Indiana through their programs

and initiatives. Increasingly, local governments are adopting GIS technology. Quasi-governmental and grassroots groups such as the Indiana Land Resources Council (Hoosier Farmland Preservation Task Force. 1999. *Final Report*), Water Agencies To Enhance Resources (W.A.T.E.R.), and the Indiana Land Use Consortium have strongly expressed the need for coordinated GIS to support their varied agendas. From utilities to agriculture and real estate, private industry in Indiana recognizes the importance of a statewide GIS. Through innovative projects such as SAVI Community Information System (The Polis Center and United Way of Central Indiana. 2001. SAVI Interactive www.savi.org) and the Electronic Atlas of Central Indiana (IUPUI University Library. 2001.), universities now boast core GIS experience available for implementation of this technology (Appendix F: Academic Sub-Survey), including essential experience managing the partnerships required for large-scale enterprise GIS implementation.

IGIC Goals and Objectives

In many ways IGIC's goals and objectives are the heart of the strategic plan. While IGIC's mission and vision answer the big questions about why IGIC exists and how it seeks to benefit society, the goals and objectives are the plan of action - what IGIC intends to "do" over the next few years. As such, this section serves as a useful guide for operational planning and a reference for evaluation.

Dissemination of Data and Data Products (Data Sharing Committee)

To identify and prioritize options for data sharing in Indiana, to include review of data sharing cooperatives, data clearinghouses, distributed data access mechanisms, issues regarding data maintenance and standards, etc., and develop a data sharing implementation plan.

- Facilitate Indiana Framework data
  - Identify and catalog data
  - Provide access to data
  - Enhance framework data
  - Maintain the framework
- Facilitate Indiana non-framework data
  - Identify and catalog other data sets
- Provide access to data through a data catalog and data clearinghouse
  - Facilitate use of data
  - Identify customers/users
  - Identify partners
  - Market this capability in Ed. And Outreach

Education and Outreach (Education Committee)

To identify and prioritize educational objectives of the Indiana Geographic Information Council and the Indiana GIS Initiative, the IGIC Education and Outreach Committee recently merged with the University GIS Alliance to enabling regional GIS user's groups and coordinate with other GIS educational groups.

- Develop marketing plan for council

- Identify target audiences
- Establish workgroup from ed. Committee.
- Identify methods of marketing
- Establish domain – GIS org
- Maintain web page

- Define GISville (model use of GIS throughout a community)
  - Advertise successes
  - Provide (GIS 101) programs
  - Build GISville demo
  - Create GIS Reader
- Be a source for tech/policy info
  - Seminars
  - White papers
  - Legislation
  - Case studies
  - Conferences
  - Speakers bureau
- Incorporate GIS into school curriculum
  - K-12 – concepts
  - Continuing Education
  - Higher education
    - Professional development
    - Tool for other disciplines

Adoption of Standards (Standards and Recommendation Committee)

To provide recommendations and guidelines to Indiana GIS users communities to facilitate the collection, maintenance and analysis of GIS data; and, to communicate existing federal, state and local data standards. The Data Standards and Recommendation Committee will not recommend software, hardware or operating systems. Furthermore, the Data Standards and Recommendation Committee will not impose any of these recommendations and guidelines as a requirement on any GIS user community.

- Communicate existing standards
- Make recommendations as guidelines for Indiana

Building Partnerships (Networking Committee)

To develop a Web-based "GIS Rolodex" for Indiana that is dynamic, self-registering, and may be facilitated by the Indiana GIS Comprehensive Questionnaire.

- Facilitate inter government development of base map
  - Identify opportunity
  - Identify Benefits
  - Identify Costs
  - Document demand

- Establish priorities

- Facilitate intra and non governmental data
- Share best practices to celebrate successes
- Facilitate regional partnerships
  - Identify priorities and opportunities
  - Regional GIS user groups

Management Goals and Objectives

In addition to the above goals that meet the specific objectives of the Indiana Geographic Information Council, the strategic planning workgroup also identified organizational goals for IGIC. In its first year of transition and development, IGIC was hosted institutionally by The Polis Center at IUPUI. As outlined in the Governor's Proclamation and by the preceding Indiana GIS Initiative Steering Committee, IGIC is now operating as a stand-alone organization and is in the process of incorporating as a not-for profit organization. Over the next two years, IGIC will continue pursuing the following organizational management goals and objectives:

Organizational Goal - Becoming Self-sustaining

- Identify sources of funding
- Consider options
  - Begin operations as 501.c3 status
  - Establish permanent office
    - Stand alone office
    - Interagency office
    - University office
- Establish business plan sub-group / financial solutions sub-group
- Provide staff support for IGIC